# COMMONWEALTH OF VIRGINIA Department of Environmental Quality Valley Regional Office

# STATEMENT OF LEGAL AND FACTUAL BASIS Significant Permit Modification

Mohawk Industries Inc. – Lees Carpet Division Rockbridge County, Virginia Permit No. VRO80269 Effective Date: June 7, 2012 Expiration Date: June 6, 2017

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Mohawk Industries, Inc. has applied for a Title V Operating Permit for its Glasgow, Virginia facility. The Department has reviewed the application and has prepared a Title V Operating Permit.

Engineer/Permit Contact:	-signed original-	Date:	1/29/2014
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Air Permit Manager:	-signed original-	Date:	1/29/2014
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#### **REQUESTED MODIFICATION**

On 9/18/13, the Valley Regional Office received a permitting request from Mohawk Industries, Inc. – Lees Carpet Division (Mohawk), dated 9/9/13, for a significant permit modification to the facility's Title V operating permit.

Mohawk requested the following changes to the Title V permit:

• Fuel Burning and Coal Handling Equipment – The facility shutdown the Erie City coal-fired boiler (B7), rated at 155 MMBtu/hr, and all associated coal handling equipment in October 2012. After the shutdown of the equipment, the State Operating Permit (SOP), dated 12/2/09, as amended 3/19/12, for the two remaining boilers (B5 and B6), was amended on 8/6/13 to remove the use of residual oil as an approved fuel, and increase the fuel throughputs of natural gas and distillate oil for each boiler. After the changes the facility is no longer classified as a Prevention of Significant (PSD) major source.

A copy of the SOP, dated 12/2/09, as amended 3/19/12 and 8/6/13, and the associated engineering memo outlining the changes to the NSR permit are provided in Attachment A.

• Yarn Dye Lines – In addition to the removal of Boiler B7 and the changes in fuels for Boiler B5 and B6, the steam throughput limitations were removed from the minor NSR permits for the Ilma Dye Line (YD1) and the four Superba Dye Lines (SL1-SL4). The Ilma Dye Line (YD1) operates under a minor NSR permit dated 8/1/07 as amended 8/7/13; limitations on the usage of yarn dye usage, and lubricant usage for the existing Ilma Dye Line (YD1) were also removed from the minor NSR permit. The four Superba Dye Lines (SL1-SL4) operate under a minor NSR permit dated 7/1/08, as amended 10/22/09 and 8/8/13.

A copy of the minor NSR permit for the Ilma Dye Line (YD1), dated 8/1/07 as amended 8/7/13, is included as Attachment B; the minor NSR permit for the four Superba Dye Lines (SL1-SL4), dated 7/1/08, as amended 10/22/09 and 8/8/13, is included as Attachment C.

• Carpet Backing Lines – The facility shutdown the following carpet backing equipment: Hot Melt Line (HM1), which includes the Storage Silo (Pellet1), Hot Melt Mix Tanks (HMM), and Remote Hot Melt Mix Tank (RHMM); and the Extruded Coat Carpet Backing Line (EC), including Hot Melt Extruder (HM1-MC), Hot Melt Extruder Pellet Receiver Tanks (HM1-RTD2 and HM1-RTD3), Pellet Storage Silo (Pellet 2), Trial Pellet Receiver Tank (HM1-RTD4). The Extruded Coat Carpet Backing Line (EC) is covered under a minor NSR permit dated 3/27/06.

All conditions related to the shutdown equipment have been removed from the permit.

- Facility Wide Hazardous Air Pollutant Changes The facility-wide hazardous air pollutant (HAP) conditions were revised to remove limitations, references, monitoring, and recordkeeping requirements associated with Boiler B7.
- **Insignificant Emission Units** The ash silo (AshS) was removed from facility, and has therefore been removed from the insignificant emission units list.

In addition to the description of changes listed above, the format of the Title V permit was updated to reflect changes made to the Title V boilerplate since the Mohawk Title V permit was issued.

### REASON FOR MODIFICATION

The facility has requested a significant modification to the current Title V operating permit, with an effective date of June 7, 2012 and an expiration date of June 6, 2017. This modification will include the incorporation of the revisions to the applicable SOP and NSR permits as described above.

### **APPLICABILITY OF 9 VAC 5-80-230**

According to 9 VAC 5-80-230, significant modification procedures must be used for those permit modifications that do not qualify as minor permit modifications under 9 VAC 5-80-210 or as administrative amendments under 9 VAC 5-80-200. The modification proposal to the Mohawk Title V operating permit does not meet the specifications for an administrative amendment or a minor permit modification. The Regulations further list criteria, any of which, if met, require use of significant modification procedures. The changes proposed by the facility meet the following criterion, as stated in 9 VAC 5-80-230.A.1:

Significant modification procedures shall be used for those permit modifications that involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit...

The Title V permit modifications require the establishment of emission limitations, standards, and monitoring through the incorporation of the new and modified applicable requirements in the NSR permits.

The SOP for the Fuel Burning Equipment, dated 12/2/09, as amended 3/19/12 and 8/6/13, was amended to reflect the shutdown of Boiler B7, and the changes to the fuels and throughputs for Boilers B5 and B6. The Title V modification incorporates the changes to the SOP into the Title V permit.

A significant amendment for the Ilma Dye Line (YD1) was issued on 8/7/13; this permit replaces the permit dated 8/1/2007. The Title V modification incorporates the changes to the NSR permit into the Title V permit.

A significant amendment for the four Superba Dye Lines (SL1-SL4) was issued on 8/8/13; this

permit replaces the permit dated 7/1/08, as amended 10/22/09. The Title V modification incorporates the changes to the NSR permit into the Title V permit

Since the changes proposed by the facility meet at least one criterion listed in 9 VAC 5-80-230 and do not qualify as an administrative amendment or minor permit modification, the changes must be processed as a significant permit modification.

#### CHANGES TO TITLE V OPERATING PERMIT

The following changes have been made to the Title V Operating Permit.

# **Facility Information**

References to the coal-fired boiler (B7), the coal handing equipment, and the use of residual oil have been removed from the facility description.

There are no other changes to this section of the permit.

#### **Emission Units**

The Emission Units table was updated to indicate changes in the emission units and applicable permits for the facility.

### Fuel Burning Equipment:

Boiler B7 was removed from the permit; references to residual oil for boilers B5 and B6 were also removed. The SOP date for boilers B5 and B6 was changed to reflect the recent amendment.

#### Coal Handling System:

The coal handling equipment has been shutdown and has therefore been removed from the emission units table.

#### Yarn Dye Lines:

The NSR permit dates for the Ilma Dye Line (YD1) and the four Superba Dye Lines (SL1-4) were changed to reflect the recent amendments.

# Carpet Backing Lines:

The following equipment was removed from the Carpet Backing Lines: Hot Melt Line (HM1), Hot Melt Mix Tanks (HMM), Remote Hot Melt Mix Tanks (RHMM), Hot Melt Extruder (HM1 MC), Hot Melt Extruder Pellet Receiver Tank 2 (HM1 RTD2), Hot Melt Extruder Pellet Receiver Tank 3 (HM1 RTD3), Pellet Storage Silo (Pellet 2), and Trial Pellet Receiver Tank (HM1 RTD4).

There are no other changes to this section of the permit.

# **Fuel Burning Equipment**

The changes to the SOP, dated 12/2/09, as amended 3/19/12 and 8/6/13, are incorporated into the Title V permit.

# **Limitations**:

The following limitations are state BACT requirements from the SOP issued on 12/2/09, as amended 3/19/12 and 8/6/13. The following limitations are specific boilers B5 and B6. Please note that the condition numbers are from the NSR permit. A copy of the permit is enclosed in Attachment A.

Condition 3: Boiler emissions shall be controlled through proper operation and

maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization with the manufacturer's operating instructions,

at minimum.

Condition 4: The approved fuels for Boilers B5 and B6 are natural gas and

distillate oil.

Condition 5: Specifications for distillate oil to be burned in the boilers (B5 and

B6). The maximum sulfur content per shipment is set at 0.05

percent.

Condition 6: The condition establishes fuel throughputs for natural gas and

distillate oil for each boiler B5 and B6.

Condition 8: The condition establishes the hourly and annual emission limits for

boiler B5.

Condition 9: The condition establishes the hourly and annual emission limits for

boiler B6.

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-40-900, Existing Source Standard for Particulate Matter (PM) (ACQR 1-6)

9 VAC 5-40-930, Existing Source Standard for Sulfur Dioxide (SO<sub>2</sub>) (ACQR 1-6)

9 VAC 5-40-940, Existing Source Standard for Visible Emissions

Boilers B5 and B6 are each subject to more stringent standards for PM and SO<sub>2</sub> in the SOP as detailed above. A limitation on the visible emissions from boiler B5 and B6 has been established in the Title V permit in accordance with 9 VAC 5-40-940.

# Monitoring and Recordkeeping:

The following monitoring and recordkeeping requirements are from the SOP issued on 12/2/09, as amended 3/19/12 and 8/6/13; the requirements refer to boilers B5 and B6:

Condition 7: To show compliance with the fuel specifications and fuel

throughput limitations, the facility is required to obtain fuel certifications for each shipment of distillate oil. The condition

outlines the requirements of the fuel certification.

Condition 3: The facility must keep records of the required boiler operation

and maintenance training, including a statement of time, place and nature of the training provided. In addition, the facility must have available good written operating procedures and a maintenance schedule for the boilers. The procedures shall be based on the manufacturer's recommendations, at a minimum. All records required shall be kept on site and be made available

for inspection by the DEQ.

Condition 10: In order to demonstrate compliance with the emission limits

contained in the permit, the facility is required to keep records of: the monthly and annual natural gas and distillate oil usage for each boiler; all fuel supplier certifications; and written operating procedures and maintenance and training records.

In addition to the monitoring and recordkeeping requirements are from the SOP, Condition 8 of the Title V permit requires the facility to conduct weekly inspections of each stack (B5 and B6) to determine the presence of visible emissions. If during the inspection, visible emissions are observed, an EPA Method 9 (40 CFR Part 60, Appendix A) visible emissions evaluation (VEE) shall be conducted. The requirement to conduct visible emission observations satisfies the periodic monitoring requirement establishing compliance with visible emission limitation. Condition 9 of the Title V permit requires the facility to take corrective actions if the VEE indicates the visible emissions exceed the visible emission limitation.

The hourly emission limits established for boiler B5 and B6, for all criteria pollutants (particulate matter, SO<sub>2</sub>, NO<sub>X</sub>, CO and VOC) are based on the rated capacities and rated hourly fuel consumption of each boiler. The following equation and emissions factors will be used to determine actual emissions from the operation of each boiler B5 and B6:

 $E = F \times N$ 

Where: E = emission rate (lb/time period)

F = pollutant specific emission factor, provided below N= fuel consumed (million ft<sup>3</sup>/time period for natural gas

and 1000 gal/time period for distillate oil)

#### Natural Gas Emission Factors – Boilers B5 and B6

Pollutant	Emission Factor		Source of DEQ Factor	
Fonutant	Boiler B5 Boiler B6		Source of DEQ Factor	
PM (lbs/mmcuft)	1.9	1.9	AP-42 Table 1.4-2 (filterable)	
PM10 (lbs/mmcuft) <sup>a</sup>	7.6	7.6	AP-42 Table 1.4-2 (filterable and	
			condensable)	
PM2.5 (lbs/mmcuft) <sup>a</sup>	7.6	7.6	AP-42 Table 1.4-2 (filterable and	
			condensable)	
SO <sub>2</sub> (lbs/mmcuft)	0.6	0.6	AP-42 Table 1.4-2	
NO <sub>X</sub> (lbs/mmcuft)	280	100	AP-42 Table 1.4-1	
CO (lbs/mmcuft)	84	84	AP-42 Table 1.4-1	
VOC (lbs/mmcuft)	5.5	5.5	AP-42 Table 1.4-2	

<sup>(</sup>a) PM10/PM2.5 emission factors include total condensable and filterable particulate matter

#### Distillate Oil Emission Factors – Boilers B5 and B6

Dollutont	Emission Factor		Course of DEO Factor	
Pollutant	Boiler B5	Boiler B6	Source of DEQ Factor	
PM (lbs/1000gal)	2	2	AP-42 Table 1.3-1 (filterable)	
PM10 (lbs/1000gal) <sup>b</sup> 2.3	2.3	AP-42 Table 1.3-2 (filterable) and		
	2.3	2.3	AP-42 Table 1.3-7 (condensable)	
PM2.5 (lbs/1000gal) <sup>b</sup>	1.55	1.55	AP-42 Table 1.3-2 (filterable) and	
			AP-42 Table 1.3-7 (condensable)	
SO <sub>2</sub> (lbs/1000gal) <sup>a</sup>	7.1	7.1	AP-42 Table 1.3-1 at Max Sulfur Indicated	
NO <sub>x</sub> (lbs/1000gal)	24	20	AP-42 Table 1.3-1	
CO (lbs/1000gal)	5	5	AP-42 Table 1.3-1	
VOC (lbs/1000gal)	0.2	0.2	AP-42 Table 1.3-3	

<sup>(</sup>a) SO<sub>2</sub> emission factor is based on average sulfur content of oil burned.

When firing natural gas, hourly emissions for particulate, SO<sub>2</sub>, CO and VOC are based on AP-42, Chapter 1.4, *Natural Gas Combustion* (September 1998). Hourly emissions of criteria pollutants (particulate, SO<sub>2</sub>, CO and VOC) when firing on distillate oil are based on the emission factors from AP-42, Chapter 1.3, *Fuel Oil Combustion* (September 1998). Short-term emission limits for SO<sub>2</sub> are based on the maximum allowable sulfur content of 0.05 percent, as established in Condition 5 of the SOP dated 12/2/09, as amended 3/19/12 and 8/6/13. Calculations showing the emission factors and emission calculations are available in Attachment A.

Annual emissions for each boiler are calculated based on the maximum fuel throughput contained in the SOP. Condition 6 of the SOP (dated 12/2/09, as amended 3/19/12 and 8/6/13) limits the total fuel throughput for each boiler. Boiler B5 is limited to 4,347,826 gallons of distillate oil per year, while boiler B6 is limited to 2,608,696 gallons of distillate oil per year; there is no limit on the throughput of natural gas for either boiler. Calculations showing the emission factors and emission calculations are available in Attachment A. Recordkeeping demonstrating compliance with the fuel throughput limits provides

<sup>(</sup>b) PM10/PM2.5 emission factors include total condensable and filterable particulate matter

reasonable assurance of compliance with the annual criteria pollutant emission limits, satisfying the periodic monitoring requirement. The facility will also be required to keep records of the DEQ-approved, pollutant-specific emission factors and the equations for calculating emissions.

# Testing:

There are no changes to this section of the permit.

# Compliance Assurance Monitoring (CAM) Applicability:

The CAM plan for the multicyclone for boiler B7 has been removed from the Title V permit since the boiler has been shutdown; the CAM plan for the multicyclone is not applicable to boilers B5 or B6.

Boilers B5 and B6 are natural gas and distillate oil boilers. Boiler B6 does not meet the criteria for 40 CFR Part 64 Compliance Assurance Monitoring (CAM) applicability (40 CFR §64.2(a)(3)) because pre-control PTE for all criteria pollutants for the boiler are under the Title V major threshold of 100 tons per year. Boiler B5 does not meet the criteria for 40 CFR Part 64 CAM applicability (40 CFR §64.2(a)(2)) because the boiler does not use a pollution control device to achieve compliance with any emission limitation or standard. CAM is not applicable to boilers B5 and B6.

### **Hazardous Air Pollutant Conditions:**

There are no changes to this section of the Title V permit.

There are no other changes to the Fuel Burning Equipment section of the Title V permit.

# Yarn Dye Lines

#### <u>Limitations</u>:

YD1 - #1 Ilma Dye Line: The following conditions are from the minor NSR permit dated 8/1/2007 as amended 8/7/13. Condition numbers listed reference the minor NSR permit. A copy of the permit is attached (Attachment B).

Condition 2: VOC emissions from the carpet yarn dye are limited to 0.0005

pounds VOC per pound of yarn day as applied, calculated as a

monthly weighted average.

Condition 3: VOC emissions from the carpet varn lubricant are limited to 0.003

pounds VOC per pound of yarn lubricant as applied, calculated as

a monthly weighted average.

Condition 4: The throughput of carpet yarn dye shall not exceed 40,996,800

pounds per year, calculated monthly as the sum of each

consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual

monthly totals for the preceding 11 months.

Condition 5: The throughput of carpet yarn lubricant shall not exceed 3,416,400

pounds per year, calculated monthly as the sum of each

consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual

monthly totals for the preceding 11 months.

Condition 6: The condition establishes the hourly and annual VOC limits for the

Ilma dye line (YD1).

Condition 7: Visible emissions from each YD1 exhaust stack (YD1-1, YD1-2,

and YD1-3) of the #1 Ilma dye line (YD1) shall not exceed five percent opacity as determined by 40 CFR 60, Appendix A, Method

9.

Condition 13: The permittee shall develop, maintain, and have available to all

operators, good written operating procedures for the operation of

YD1.

Superba Dye Lines (SL1 – SL4): The following conditions are from the minor NSR permit dated 7/1/08, as amended 10/22/09 and 8/8/13. Dye Lines SL5 and SL6 were never constructed. A copy of the permit is attached (Attachment C).

Condition 2: VOC emissions from the carpet yarn dye used in SL1 – SL4 are

limited to 0.000441 pounds VOC per pound of yarn dye as applied,

calculated as a monthly weighted average.

Condition 3: VOC emissions from the carpet varn lubricant used in SL1 – SL4

are limited to 0.004 pounds VOC per pound of yarn lubricant as

applied, calculated as a monthly weighted average.

Condition 6: The throughput of carpet yarn dye shall not exceed 1,051,200

pounds per year per dye line (SL1-SL4), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to

the individual monthly totals for the preceding 11 months.

Condition 7: The throughput of carpet yarn lubricant shall not exceed 262,800

pounds per year per dye line (SL1-SL4), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to

the individual monthly totals for the preceding 11 months.

Condition 8: The condition establishes the hourly and annual VOC limits for the

Superba Dye Lines (SL1-4).

Condition 9: Visible emissions from each exhaust stack of the dye lines (SL1 –

SL4) shall not exceed five percent opacity as determined by EPA

Method 9 (reference 50 CFR 60, Appendix A).

#### Monitoring and Recordkeeping:

All dye lines: YD1 and SL1 – SL4

The permit requires that VOC emissions from each of the dye lines be limited based on pounds of VOC per pound of yarn dye and per pound of yarn lubricant, as applied. The limits vary for each of the four lines. Periodic monitoring necessary to reasonably assure compliance with these requirements is accomplished by the following monitoring approach:

- The VOC content of each dye or lubricant as supplied shall be determined by the permittee or the supplier initially or when the dye or lubricant is modified or substituted using Reference Method 24 or 24A (40 CFR Part 60, Appendix A). Such content shall be used for purposes of calculating emissions, the monthly weighted average mass of VOC per mass of yarn dye as applied and the monthly weighted average mass of VOC per mass of yarn lubricant as applied.
- Each dye and lubricant as supplied whose MSDS indicates a VOC content of 100 percent by weight may be assumed to be 100 percent VOC for the purpose of calculating emissions, the monthly weighted average mass of VOC per mass of yarn dye as applied and the monthly weighted average mass of VOC per mass of yarn lubricant as applied in lieu of Reference Method 24 or 24A (40 CFR Part 60, Appendix A) testing.
- Each new dye and lubricant as supplied received after the effective date of the permit or when the dye or lubricant is modified or substituted shall be tested by the permittee or supplier within 90 days of the receipt of shipment, modification or substitution. Each dye and lubricant as supplied shipment received shall be clearly identified by a product formulation number that may be correlated to Method 24 or 24A test results.
- Until such time as testing is conducted for the purpose of calculating the monthly
  weighted average mass of VOC per mass of yarn dye or lubricant as applied in the #1
  Ilma line (YD1), the VOC content of each dye or lubricant as supplied shall be based on
  formulation data as shown on the Material Safety Data Sheet (MSDS) or other vendor

information. If the VOC content is given as a range, the maximum value shall be used.

These conditions provide reasonable assurance that the VOC pound per pound of yarn dye as applied limit, the VOC pound per pound of yarn lubricant as applied limit and the emission limitation will be met.

Additionally, the monthly weighted average mass of VOC per mass of yarn dye or lubricant as applied for each dye line will be determined using the following equation:

$$VOC = \frac{\sum_{i=1}^{n} W_i M_i}{\sum_{i=1}^{n} M_i}$$

Where:

VOC = the weighted average mass, in pounds, of VOC per mass, in

pounds, of yarn dye or lubricant applied each calendar month

W<sub>i</sub> = the weight fraction of VOC of each yarn dye or lubricant (i)

applied during the calendar month

M<sub>i</sub> = the total mass, in pounds, of each yarn dye or lubricant (i) applied

during the calendar month

The permit requires that average hourly VOC emissions be determined in order to demonstrate compliance with the hourly emissions limits in the permit. The emissions shall be calculated on a monthly basis, for each dye line, using the equation below:

$$E_{voc} = \frac{\left(\sum_{i=1}^{n} W_{dye,i} M_{dye,i} + \sum_{i=1}^{n} W_{lub,i} M_{lub,i}\right)}{H}$$

Where:

 $E_{voc}$  = the average hourly VOC emissions in pounds per hour

 $W_{dye,I}$  = the weight fraction of VOC of each yarn dye (i) applied during

the calendar month

 $M_{dye,I}$  = the total mass, in pounds, of each yarn dye (i) applied during the

calendar month

 $W_{lub,I}$  = the weight fraction of VOC of each yarn lubricant (i) applied during the calendar month

during the calendar month

 $M_{lub,I}$  = the total mass, in pounds, of each yarn lubricant (i) applied during

the calendar month

H = the total number of hours of operation during the calendar month

The permittee shall determine compliance with the annual VOC emission limit for each dye line using the following equation:

$$E_{voc} = \frac{\left(\sum_{i=1}^{n} W_{dye,i} M_{dye,i} + \sum_{i=1}^{n} W_{lub,i} M_{lub,i}\right)}{2000}$$

Where:

 $E_{voc}$  = the total monthly VOC emissions in tons

 $W_{dve,i}$  = the weight fraction of VOC of each yarn dye (i) applied during

the calendar month

 $M_{dve,i}$  = the total mass, in pounds, of each yarn dye (i) applied during the

calendar month

 $W_{lub,i}$  = the weight fraction of VOC of each yarn lubricant (i) applied

during the calendar month

M<sub>lub.i</sub> = the total mass, in pounds, of each yarn lubricant (i) applied during

the calendar month

Annual VOC emissions shall be calculated monthly as the sum of each consecutive 12-month period.

The permit requires that visible emissions inspections be conducted on the each exhaust stack for each dye line, as follows:

At a minimum of once per week, the permittee shall determine the presence of visible emissions. If during the inspection, visible emissions are observed, visible emissions evaluation (VEE) shall be conducted in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A). The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed five percent opacity, the VEE shall be conducted for a total of 60 minutes. If the 60 minutes VEE indicates a violation of the standard, corrective action shall be taken.

All visible emissions inspections shall be performed when the equipment is operating.

If visible emissions inspections conducted during 12 consecutive weeks show no visible emissions for a particular stack, the permittee may reduce the monitoring frequency to once per month for that stack. Anytime the monthly visible emissions inspections show visible emissions, or when requested by DEQ, the monitoring frequency shall be increased to once per week for that stack.

All observations, VEE results, and corrective actions taken shall be recorded.

#### Testing:

There are no changes to this section of the permit.

#### CAM Applicability:

CAM does not apply to any of the yarn dye lines as none of the lines have add-on control devices.

There are no other changes to this section of the permit.

# **Carpet Backing Lines Conditions**

The facility has shutdown the following equipment:

Hot Melt Line (HM1), which includes the Storage Silo (Pellet1), Hot Melt Mix Tanks (HMM), and Remote Hot Melt Mix Tank (RHMM); and the Extruded Coat Carpet Backing Line (EC), including Hot Melt Extruder (HM1-MC), Hot Melt Extruder Pellet Receiver Tanks (HM1-RTD2 and HM1-RTD3), Pellet Storage Silo (Pellet 2), Trial Pellet Receiver Tank (HM1-RTD4).

All references and conditions associated with the equipment have been removed from the permit. The Extruded Coat Carpet Backing Line (EC) is covered under a minor NSR permit dated 3/27/2006; the facility entered into a mutual shutdown determination for the Extruded Coat Carpet Backing Line (EC) on August 20, 2012.

There are no other changes to this section of the permit.

# Facility Wide Hazardous Air Pollutant Conditions: Printing, Coating, and Dyeing of Fabrics and Other Textiles

The following equipment was removed from this section of the Title V permit: Hot Melt Mix Tanks (HMM); Remote Hot Melt Mix Tank (RHMM); and the Hot Melt Extruder (HM1-MC).

The Belmont Dye Line (BL1) was added to the Dyeing and Finishing Subcategory in the permit. There are no minor NSR conditions or requirements associated with the Belmont Dye

Line (BL1); therefore all conditions associated with the Belmont Dye Line (BL1) are taken from the MACT. There are no changes to the limitations, monitoring, recordkeeping, or reporting associated with the addition of the Belmont Dye Line (BL1).

The condition requiring the facility to retain a copy of the applicability determination for 40 CFR 63 Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters at Major Sources) was removed from the permit. The facility is an area source of HAPs, therefore the MACT, Subpart DDDDD does not apply to the boilers at the facility. Since the boilers are existing sources, and the applicability date of the MACT is January 31, 2016, the boilers are not subject to the "once-in, always-in" MACT rule; the boilers will be subject to the area source boiler MACT (40 CFR 63 Subpart JJJJJJ) after the compliance date for existing boilers (March 21, 2014).

### **Facility Wide Conditions**

All references to coal and Boiler B7 were removed from the Facility Wide Conditions.

#### **Insignificant Emission Units**

The insignificant emission units list was updated to remove the ash silo (AshS) from the insignificant emissions units.

There are no other changes to this section of the permit.

### **Permit Shield and Inapplicable Requirements**

The provisions of 40 CFR Part 98 – Mandatory Greenhouse Gas Reporting require owners and operators of general stationary fuel combustion sources that emit 25,000 metric tons CO<sub>2e</sub> or more per year in combined emissions from such units, to report greenhouse gas (GHG) emissions, annually. The definition of "applicable requirement" in 40 CFR 70.2 and 71.2 does not include requirements such as those included in Part 98, promulgated under Clean Air Act (CAA) section 114(a)(1) and 208. Therefore, the requirements of 40 CFR Part 98 are not applicable under the Title V permitting program.

As a result of several EPA actions regarding GHG under the CAA, emissions of GHG must be addressed for a Title V permit renewed after January 1, 2011. The current state minor NSR and PSD permits for Mohawk Industries contains no GHG-specific applicable requirements and there have been no modifications at the facility requiring a PSD permit. Therefore, there are no applicable requirements for the facility specific to GHG.

There are no changes to this section of the permit.

#### **General Conditions**

There are no changes to this section of the permit.

#### **PUBLIC PARTICIPATION**

The public participation requirements of 9 VAC 5-80-270 apply to significant permit modifications. A public notice regarding the draft permit was placed in the *News Gazette*, on December 11, 2013. West Virginia, the only affected state, was sent a copy of the public notice in a letter dated December 11, 2013. All persons on the Title V mailing list were also sent a copy of the public notice via either letter or email dated December 11, 2013. Public comments were accepted from December 11, 2013 through January 13, 2014; no comments were received.

EPA was notified of the public notice and sent a copy of the Statement of Basis and draft permit on December 10, 2013. The 45-day EPA review period ran concurrently with the public comment period and ended on January 28, 2014. No comments were received.

# **ATTACHMENTS**

Attachment A: Fuel Burning Equipment– State Operating Permit (dated 12/2/09, as

amended 3/19/12 and 8/6/13), and Associated Engineering Analysis

Attachment B: Ilma Yarn Dye Line – Minor New Source Review Permit (dated 8/1/2007

as amended 8/7/13)

Attachment C: Superba Dye Lines – Minor New Source Review Permit (dated 7/1/2008,

as amended 10/22/2009 and 8/8/13)